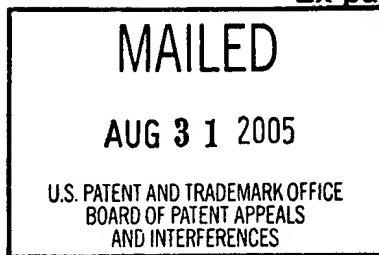


The opinion in support of the decision being entered today was **not** written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte MAHMOUD R. SHERIF and AHMED A. TARRAF



Appeal No. 2005-2145
Application No. 09/503,990

ON BRIEF

Before THOMAS, HAIRSTON, and DIXON, **Administrative Patent Judges**.
DIXON, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-2, 9-11 and 15. Claims 3-8 and 12-14 are indicated as being objected to by the examiner.

We REVERSE.

BACKGROUND

Appellants' invention relates to a mobile to mobile digital wireless connection having enhanced voice quality. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method for communicating characterized by the step of:
 - receiving a first encoded voice signal as a first set of voice signal parameters;
 - directing the first set of voice signal parameters to a first speech decoder to generate a voice signal;
 - feeding the voice signal from the first speech decoder to an adaptive filter to produce a modified voice signal, the adaptive filter being operative to modify the spectrum of the voice signal from the first speech decoder so as to substantially compensate for spectral distortion introduced by an encoding and decoding of the voice signal;
 - feeding the modified voice signal to a speech encoder to convert the modified voice signal into an encoded modified voice signal represented by a second set of voice signal parameters; and
 - transmitting the second set of voice signal parameters.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Weaver, Jr. et al. (Weaver)	5,903,862	May, 11, 1999
	(applicable filing date Jan. 25, 1995)	

Haykin, Simon "Adaptive Filter Theory" , Third Edition, published 1996 by Prentice-Hall (NJ), pages 2-5 and 9-21.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejections, we make reference to the answer (mailed Oct. 4, 2004) for the examiner's reasoning in support of the rejections, and to the brief (filed Aug. 23, 2004) for appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we make the determinations which follow.

35 U.S.C. § 103

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. **See In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See In re Lintner**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the

claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. **See In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. **See In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert. denied**, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. **See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art

would lead that individual to combine the relevant teachings of the references.” **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). “Broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence.’” **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). “Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact.” **Dembiczak**, 175 F.3d at 999-1000, 50 USPQ2d at 1617, citing **McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Further, as pointed out by our reviewing court, we must first determine the scope of the claim. “[T]he name of the game is the claim.” **In re Hiniker Co.**, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Therefore, we look to the language of independent claim 1 which recites “feeding the voice signal from the first speech decoder to an adaptive filter to produce a modified voice signal, the adaptive filter being operative to modify the spectrum of the voice signal from the first speech decoder so as to substantially compensate for spectral distortion introduced by an encoding and decoding of the voice signal.” This modified voice signal is then processed through a second vocoder.

The examiner admits that Weaver does not teach (or fairly suggest) the use of an “adaptive filter” to modify the spectrum of the voice signal to compensate for spectral distortion from the use of the first vocoder. (Answer at page 4.) The examiner relies upon the general teachings in Haykin with respect to the use of adaptive filters in a variety of environments to suggest the specific use of an adaptive filter as recited in the language of independent claim 1 (and 9).


Appellants argue that the examiner has not established a suggestion in the prior art or a convincing line of reasoning as to why it would have been obvious to one of ordinary skill in the art at the time of the invention to use an adaptive filter with the tandem vocoders as claimed. (Brief at page 8-11.) We agree with appellants and note that while Weaver does recognize the distortion problem with the use of a tandem vocoder and Weaver lists and suggests various methodologies to alleviate or lessen the distortion, we find no sufficient suggestion in Weaver and no convincing line of reasoning why skilled artisans would have looked to implement an adaptive filter as recited in the language of independent claim 1.

Therefore, we find that the prior art combination of Weaver and Haykin, as presented by the examiner, does not establish a ***prima facie*** case of obviousness of the claimed invention. For the Board to find otherwise, we would have to rely on impermissible hindsight or speculation, which we will not do.

Therefore, we will not sustain the rejection of independent claim 1 and its dependent claim 2. Similarly, we will not sustain the rejection of independent claim 9 and its dependent claims 10,11, and 15.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-2, 9-11 and 15 under 35 U.S.C. § 103 is reversed.



JAMES D. THOMAS
Administrative Patent Judge


KENNETH W. HAIRSTON

KENNETH W. HAIRSTON
Administrative Patent Judge

Joseph L. Lofgren

JOSEPH L. DIXON
Administrative Patent Judge

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